# Markov Processes

**Extent:** 7.5 credits  
**Cycle:** G2

**Grading scale:** TH

**Course evaluations:** [Archive for all years](#)

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Course Syllabus</th>
<th>Board of Education</th>
<th>Department / Division</th>
<th>Suitable for exchange students</th>
<th>Teaching Language</th>
<th>Entry Requirements</th>
<th>Assumed Prior Knowledge</th>
<th>Limited Number of Participants</th>
<th>Course Web Page</th>
<th>Examinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019/20</td>
<td>SV EN</td>
<td>PLED I</td>
<td>7152</td>
<td>X</td>
<td>E</td>
<td>X</td>
<td></td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2018/19</td>
<td>SV EN</td>
<td>PLED I</td>
<td>7152</td>
<td>X</td>
<td>E</td>
<td>X</td>
<td></td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2017/18</td>
<td>SV EN</td>
<td>PLED I</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td></td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2016/17</td>
<td>SV EN</td>
<td>UNB</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2015/16</td>
<td>SV EN</td>
<td>UNB</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2014/15</td>
<td>SV EN</td>
<td>UNB</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2013/14</td>
<td>SV EN</td>
<td>UNB</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2012/13</td>
<td>SV EN</td>
<td>UN1</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
<tr>
<td>2011/12</td>
<td>SV EN</td>
<td>UN1</td>
<td>7152</td>
<td>X</td>
<td>E1</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Course Web Page</td>
<td>Examinations</td>
</tr>
</tbody>
</table>

**2019/20**
## Programmes and Specialisations

### Mandatory / Elective

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>19/20</th>
<th>19/20</th>
<th>19/20</th>
<th>19/20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sp1</td>
<td>sp2</td>
<td>sp3</td>
<td>sp4</td>
</tr>
<tr>
<td>BME</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>ns</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2018/19

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>18/19</th>
<th>18/19</th>
<th>18/19</th>
<th>18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sp1</td>
<td>sp2</td>
<td>sp3</td>
<td>sp4</td>
</tr>
<tr>
<td>BME</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 2017/18

### Mandatory / Elective

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>17/18 sp1</th>
<th>17/18 sp2</th>
<th>17/18 sp3</th>
<th>17/18 sp4</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>26 16 6 0 140</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 2016/17


### 2015/16

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>15/16 sp1</th>
<th>15/16 sp2</th>
<th>15/16 sp3</th>
<th>15/16 sp4</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME</td>
<td>-</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bg</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>bg</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V 4</td>
<td>4</td>
<td>28 28 6 0</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 2014/15

### Mandatory / Elective

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>14/15 sp1</th>
<th>14/15 sp2</th>
<th>14/15 sp3</th>
<th>14/15 sp4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>BME</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Pi</td>
<td>bg</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Pi</td>
<td>sssr</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>28</td>
<td>28</td>
<td>6</td>
</tr>
</tbody>
</table>

### 2013/14
<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>13/14 sp1</th>
<th>13/14 sp2</th>
<th>13/14 sp3</th>
<th>13/14 sp4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>D</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>E</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>Pi</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>Pi</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>Pi</td>
<td>fm</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
</tr>
</tbody>
</table>

2012/13
<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>12/13 sp1</th>
<th>12/13 sp2</th>
<th>12/13 sp3</th>
<th>12/13 sp4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>D</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>D</td>
<td>ks</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>E</td>
<td>pc</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>E</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>F</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>F</td>
<td>fm</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>F</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>Pi</td>
<td>-</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>Pi</td>
<td>bm</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>Pi</td>
<td>fm</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>Pi</td>
<td>ssr</td>
<td>V</td>
<td>4</td>
<td>F</td>
<td>O</td>
<td>L</td>
<td>H</td>
</tr>
</tbody>
</table>

2011/12
### Mandatory / Elective

<table>
<thead>
<tr>
<th>Programme</th>
<th>Specialisation</th>
<th>Included in Study Year</th>
<th>Allowed from Study Year</th>
<th>11/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sp4</td>
</tr>
</tbody>
</table>

| C         | -              | V                      | 4                       |       |
| D         | -              | V                      | 4                       |       |
| D         | ks             | V                      | 4                       |       |
| E         | -              | V                      | 4                       | 2     |
| E         | pe             | V                      | 4                       | 2     |
| E         | -              | V                      | 4                       | 3     |
| F         | bm             | V                      | 4                       | 3     |
| F         | fm             | V                      | 4                       | 3     |
| F         | ssr            | V                      | 4                       | 3     |
| Pi        | -              | V                      | 4                       | 4     |
| Pi        | bm             | V                      | 4                       | 4     |
| Pi        | fm             | V                      | 4                       | 4     |
| Pi        | ssr            | V                      | 4                       | 4     |

#### 2010/11

The course was not offered this academic year.

#### 2009/10

The course was not offered this academic year.

#### 2008/09

The course was not offered this academic year.

#### 2007/08

The course was not offered this academic year.